HEALTH INDUSTRY PROFILE

EXECUTIVE SUMMARY

California has led the profound and rapid national transformation of health care financing and delivery systems since the 1970's. Although federal and state regulatory statutes facilitated some of the shift from traditional, fee-for-service indemnity insurance to pre-paid managed care coverage, economic conditions and private market forces have driven the movement toward more cost-conscious, rationalized care. This paper presents the historical context of managed care and highlights key indicators of its tremendous and varied growth; provides a brief overview of the regulatory context; defines major industry terms, structures, and players; presents the primary challenges and objectives of the industry; and discusses current industry trends.

Historical Context of Managed Care

Health insurance became a large-scale enterprise during World War II. When wages were frozen and employers sought ways to attract employees, the government permitted employer-paid health insurance to be excluded from the wage limits and the taxable incomes of employees, effectively subsidizing insurance. Union activity also encouraged the growth of employer-provided health insurance. As coverage by private sector employers proliferated, the government also became a purchaser for its employees. From 1940 to 1970, the number of Americans covered for at least hospital expenses rose from approximately 9% to over 75% of the population.

Though widespread health insurance was welcomed by individuals, insurance companies, and providers, it added complexity to the marketplace by distorting the fundamental laws of supply and demand. Prior to the 1970's, virtually all health insurance was based on the fee for service approach introduced above which basically operated as a "cost-reimbursement" model under which providers determined the cost of services. Many health care providers did not significantly coordinate care with other providers, and were free to determine treatment levels and standards of care, as fee for service enabled them to pass additional costs and "marginal" procedures and tests to price insensitive purchasers.

By 1970 expanding health care costs had become a national concern for employers, the government, and health care economists. Experts worried that if trends continued unabated, the national economy would suffer. In 1970, Dr. Paul Ellwood coined the term health maintenance organization, or "HMO" as part of his vision of a national strategy to solve America's problems of uncontrolled health care expenditure growth, fragmentation and lack of accountability.

The Regulatory Context of Managed Care

In 1973, as a reflection of growing interests and trends in HMOs, Congress passed the HMO Act, providing grant funding and a regulatory structure for the development of HMOs and required that companies with more than 25 employees that offered health benefits also offer the HMO as an option. Although HMOs grew in number and power after 1973, traditional FFS still dominated the landscape and health care costs continued to dramatically outpace inflation. Seeking to bring soaring health care costs under control, some employers proposed to continue to offer employees the traditional FFS coverage but to do so with selective provider contracting and discounted fees.

These arrangements ultimately resulted in legislation authorizing Preferred Provider Insurance (PPI), the other main form of managed care. California led the way with the passage of AB3482 in 1982. It was not until the late 1980's that the cost pressures on employers and government really forced a proliferation of managed care across the nation. As managed care has expanded and become a fact of life for a large percentage of the population, regulatory interest and activity has intensified.

Much of the regulation of health care lacks coherence or coordination. In California, different state bodies regulate different types of health plans. Medical groups and IPAs that contract with health plans to provide care are currently not regulated closely or directly by any state departments.

Major Industry Terms and Structures

Regardless of where they fall on the health care financing and delivery continuum, all managed care organizations employ techniques to control costs and quality, including but not limited to: selective provider utilization management/review, contracting, negotiated fees, quality management and enrollee incentives. Managed care spans a broad range of coverage types and employs varied techniques to encourage cost-effectiveness.

A four-tiered structure characterizes the general financial, service and information flow through the health care delivery system: the "purchasers" control the market share of the various delivery systems and contract for coverage of their enrollees, or "consumers", who ultimately receive care. The "payer" type determines how restrictive use of "providers" will be: FFS has virtually no restrictions; PPI uses very limited constraints; Point of Service encourages strong loyalty to an HMO panel of providers; HMOs restrict consumers' covered care to a specified network of providers.

Purchasers: Traditionally, there have been three main purchasers of health care: the government, employers and individuals. More recently, purchasing groups have become a significant force in the market. The past two decades have been characterized by rapidly escalating health care costs, an aging population and expansion of the number of people covered under federally subsidized programs. These developments have resulted in government assuming the responsibility for an increasing portion of the nation's total health care costs.

Although the majority of health insurance coverage in the United States has historically been linked to employment, increases in health care costs have helped prompt both a change in the type of employer coverage and a decrease in the overall percent of citizens receiving coverage through private sector work. The percent of the national employment pool being offered health care coverage dropped from 81% in 1995 to 78% in 1996.[1] Private employers provide health coverage under three primary arrangements: through a third party payer, through "self-funding" coupled with the services of a third party administrator and through pooling of buying power by joining a purchasing coalition. The smallest proportion of purchasers are those individuals who purchase

[1] Factors seen as contributing to this trend include a shift in the employment base toward service rather than production jobs, a shift to smaller companies and more wrk by independent contractors. The percentage of US workers offered health insurance increased from 74% in 1993 to 81% in 1995 before dropping in 1996.

individual insurance directly from a health plan because either they do not have access to or do not use public or employment-based coverage. Issues of economies of scale, differential negotiating power, adverse selection and tax policy have thus far limited the growth of individual purchase of coverage.

Payers and providers: Payers are the traditional indemnity insurers and newer managed care plans, and providers include physicians, hospitals, acute care centers and ancillary service suppliers. Reimbursement mechanisms between payer and provider represent one of the key distinguishing features both among health plans and among the different sub-categories of HMOs. Reimbursement can be tied to many factors, including volume and quality, and occurs on two levels, from the payer to the provider group and from the provider group to the individual provider level. Among other factors, the five commonly recognized HMO models generally differ in their provider level reimbursement arrangements.

Consumers represent the final tier of the system. Historically, consumers have had very limited direct influence on health plan or provider service structure. With the introduction of consumer choice of plan and service and cost containment, consumers are being prompted to be more assertive. Consumer feedback mechanisms in plans and provider groups are in their formative stages; their strength varies and is often limited.

Primary Challenges and Objectives

The primary challenges and objectives facing health care financing and delivery systems are those of integrating a broad range of previously independent entities to provide high quality, affordable and accessible care. Although FFS plans are integrating various components of health care financing and delivery, the HMO end of the delivery continuum is addressing the various forms of integration more systematically. Many players across the industry are moving toward innovative arrangements to integrate institutions, purchasers, providers and members, attempting to align incentives and operating systems with the goal of providing appropriate, efficient, cost-effective care in a competitive environment.

Industry Trends

<u>The Delivery System</u>

Managed care organizations' efforts to drive excess cost out of health care have affected, among many other things, the utilization of hospital beds and the overall volume and composition of the physician supply. The reduction of hospital bed utilization in California has mirrored the national trend, but well surpassed the national average. Although capacity has decreased, utilization figures show that the system still has excess capacity.

As managed care organizations have emphasized prevention and health promotion and have sought to match contracted physician supply to the needs of their enrolled populations, the HMO industry's demand for primary care physicians (PCPs) has increased and specialists have faced a tighter market. The composition of non-physician health care personnel has also changed to reflect managed care's effort to match skill and cost with patients' medical needs. Training programs and demand for certain groups of health care providers, including advanced practice nurses and

physician assistants have been increasing. Health care employers in California have indicated that they will significantly increase the number of Advanced Practice Nurses they employ over the next several years.

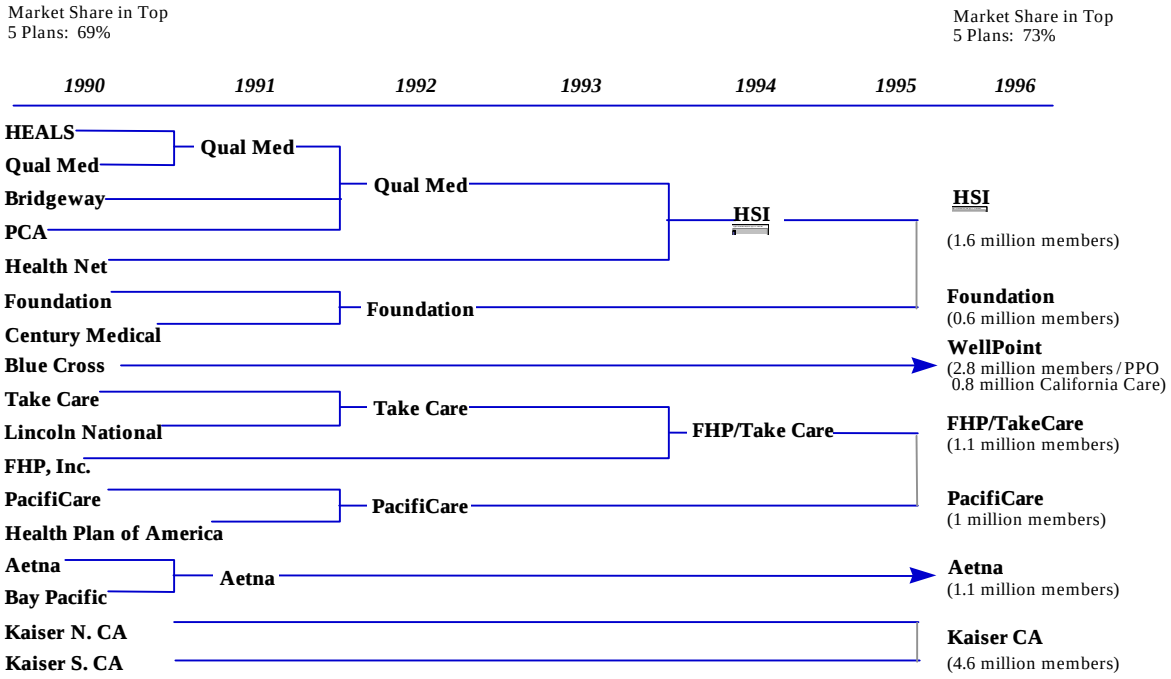
Coverage of mental health and substance abuse services has been increasing as advocacy and research have proven the extent to which they are causal or compounding factors in poor health status. The question as to how well these services will be integrated in a managed care environment remains unknown, as many organizations treat these services as "carve outs" and subcontract with specialty groups to develop networks and administer benefits. Behavioral health and health promotion activities have become "mainstream" managed care features and are being incorporated into standard medical training and practice. Clinical practice in this area relies on multi-disciplinary teams, requiring physicians to work collaboratively with allied health professionals. While there is general recognition of the need to integrate acute and long term health services, the difficulties in coming to agreement on financing have prevented the integration of long term care services into the standard package of benefits, leaving long term care as primarily a government responsibility once assets have been spent down.

Industry Structure/Mergers

The managed care industry was characterized by expansion until the late 1980's and early 1990's when widespread merger activity and industry consolidation among the larger players began. While the payer/HMO and hospital consolidations have been attracting the most attention, mergers are occurring in all tiers of the health care industry. In the late 1980's, managed care coverage was fairly extensive and HMOs were concerned that growing competition would erode their profit margins. Large, publicly traded HMOs sought to assure earnings growth through cost-cutting and entering less developed markets. Most industry observers agree, however, that despite significant merger activity, there is still a great deal of competition among health care benefits financial intermediaries at the HMO level in all but a few rural areas where competition has always been a problem. There has been concern, however, that in certain instances unequal negotiating power and the dominance of large entities in particular market segments may be anticompetitive.

As HMOs' buying and selling power increased, hospitals, medical groups, IPAs and purchasers began to consolidate as a defensive measure to protect their margins and premiums. Provider consolidations, including both hospital and medical groups, have largely followed the "horizontal merger" pattern. These horizontal mergers may cause antitrust concern in the industry. Vertical mergers combining hospital and medical groups have become more prevalent. The figure on the following page provides an illustration of consolidation in the California HMO marketplace during the 1990s.

Figure 18: CA HMO Consolidation – 1990-1996



Source: Interstudy Competitive Edge Survey, 2.2 and 7.1. Membership figures are for all products, statewide. Note: Data from July 1996; changes since then not reflected: Foundation and HHH have merged to become FHS; Pacificare and FHP have merged; and Blue Cross acquired two plans in Southern California to become the state's fourth largest plan.

Tax Status

Historically, insurance plans (e.g. Blue Shield/Blue Cross), and delivery system HMOs (e.g. Kaiser Permanente) were non-profits. This tax-free status left more money for physicians, and allowed physician-driven organizations to operate largely without access to private capital and the attendant financial accountability to Wall Street.

As health care organizations have shifted to managed care, access to private capital has become more important. Not-for-profit status has become increasingly difficult to maintain because it often precludes access to the capital critical for growth and investment. While the performance of for-profit versus not-for profit organizations in health care has been a topic of intense debate, there have been no definitive studies to date measuring quality of care differences between the two.

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I. INTRODUCTION

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II. MANAGED CARE: ITS SOURCE AND GROWTH

In its broadest definition, managed care is characterized by selective provider contracting and a defined list of benefits. The industry defines two general managed care categories: health maintenance organizations (HMOs) and preferred provider insurance arrangements (PPIs), commonly referred to as "PPOs." While these two mature models of managed care are well established, many other innovative models are rapidly developing. California has one of the highest overall managed care penetration rates in the country[2] with nearly 14 million million HMO enrollees in 1996[3]. Of those Californians who receive insurance through employment, 63% are enrolled in HMOs, 7% in POS plans, 23% in PPI plans and 7% in indemnity plans. Thus, in the privat sector, the transformation to managed care is nearly complete.

A. Origins of Widespread Health Insurance

Although the antecedents to modern health insurance began in the nineteenth century, health insurance did not become a large-scale enterprise until World War II. During the war, when wages were frozen and employers sought ways to attract employees, the government permitted employer-paid health insurance to be excluded from the wage limits and the taxable incomes of employees, effectively subsidizing employer-purchased insurance. Union activity also encouraged the growth of employer-provided health insurance. As coverage by private sector employers proliferated, the government also became a purchaser for its employees (Federal Employees Health Benefits Program, 1960), senior citizens (Title XVIII of the Social Security Act, 1965), and meeting certain categories of "deserving poor" (aged, blind, disabled, families with dependent children) and poverty criteria (Title XIX of the Social Security Act, 1965)[4]. From 1940 to 1970,

[2] Various sources place California from first to fourth in the nation in managed care penetration.

[3] CAHMO, (now CAHPs) 1996 Enrollment Survey of Plans.

[4] As part of the coalition building to pass the federal Medicare and Medicaid Acts of 1965, the government agreed to the traditional fee-for-service insurance for both programs. The FFS provision, and associated cost increases, went unamended until the late 1980's.

the number of Americans covered for at least hospital expenses rose from approximately 12 million to 159 million.[5] (Over this same time period the US population grew from approximately 132 million to approximately 203 million[6]).

B. Economics of Health Insurance

Widespread health insurance was welcomed by covered individuals, insurance companies, and providers. For covered individuals, insurance reduced the fiscal exposure of a serious medical incident. Insurers favored employer-sponsored coverage because the resulting grouping of employees resulted in broader distribution of risk. Finally, providers welcomed insurance coverage because it resulted in an increased likelihood that they would be paid.

From an economic perspective, however, insurance added complexity to a marketplace by distorting the fundamental laws of supply and demand. In the absence of health insurance, a patient would negotiate directly with the provider to determine the care plan, price and volume of services. In a "100% insured" situation, where the enrollee is not responsible for deductibles or copayments, he/she pays a fixed premium and then becomes insensitive to price and cost, distorting the "demand side" of the equation—the enrollee often wants as much care as might help his/her condition even if its benefit does not outweigh the total cost of providing the care. This price insensitivity was further accelerated after World War II when employers routinely began to pay the premium on behalf of their employees, making the price of care very distant from the consumer[7]. To the insured fully employer-insured person, health care was perceived as "free," and any care expected to be helpful to their condition, regardless of its cost-effectiveness, was viewed as a right.

Payment through insurance also renders the provider (supply side) price insensitive to the cost of care. Because unmanaged insurance assures that most or all services will be reimbursed, the provider no longer has to negotiate directly with the patient, and the economic process of balancing marginal benefit and marginal cost is eliminated[8].

Theoretically, insurers might negotiate with providers to bring supply and demand into as close a balance as possible. However, until the early 1970's a power and information imbalance in health care resulted in inevitable market failure. Medical providers had almost exclusive control of most patient and industry information, and insurers and members remained largely dependent on

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[5] HIAA Source Book of Health Insurance Data, 1992, Washington HIAA: 1992.

[6] Statistical Abstract of the United States, 1996. Over this 30 year span, coverage percentages rose from approximately 9% to approximately 78%.

[7] Consumers' premiums essentially reflect the average usage from the prior year's risk pool, plus factors for inflation, overhead, profit and expected utilization.

[8] Victor Fuchs describes the fundamental economics of health care supply and demand in health care in The Health Economy, Cambridge: Harvard University Press, 1986.

providers' authority[9]. In addition, insurers had little motivation to negotiate, because they were able to pass cost increases through to employers. Employers were not very concerned with health cost increases, particularly because health benefits enjoyed tax-favored status and health care costs remained relatively low.

C. The Fee-for-Service Era

Prior to the 1970's, virtually all health insurance was based on the unmanaged "fee for service" (FFS) approach, which basically operated as a "cost-reimbursement" model under which providers determined the cost of services. Under a FFS arrangement, expenditures increase if: 1) the fees themselves increase, 2) more units of service are charged, or 3) more expensive services are substituted for less expensive ones. Most health care providers did not substantially coordinate care with other providers, leading to "silos" of care. Providers were free to determine treatment levels and standards of care with no economic restraint, as the FFS arrangement enabled them to pass cost increases and "marginal" procedures and tests through to price insensitive purchasers.

Two main types of health insurance characterized the FFS era. Commercial insurance companies offered "indemnity" and "major medical insurance". The more common indemnity insurance was modeled after casualty insurance, had no contractual link to providers, and based fee schedules on "usual, customary, and reasonable fees". Under an indemnity plan, the insured party customarily contributed "coinsurance" representing a portion of the cost of services received in addition to a monthly or annual premium. Major medical insurance was frequently purchased as an "add-on" and typically covered most or all costs after a patient's out-of-pocket expenses reached a certain limit.

The other insurance providers active during this period were the large, powerful, provider-sponsored nonprofit Blue Cross and Blue Shield plans that were unified through the National Blue Cross and Blue Shield Association (the "Blues") and offered "service benefit" insurance. Regional Blue Cross plans contracted with hospitals, and Blue Shield contracted with physicians. Both insurance entities negotiated favorable reimbursement arrangements and enrolled as many providers as possible. The Blues maintained provider bargaining power against other insurance companies, making it easier for hospitals and physicians to maintain leverage with commercial insurers because they had the guaranteed cash flow of the Blues as an alternative. The Blues essentially made it impossible for commercial insurance to contract with providers selectively and to create the beginnings of quality and price competition[10].

In addition to fighting to maintain "free choice of provider" for patients, which made payer price negotiation with providers impossible, the provider community dominated and shaped most structures of the FFS era. Providers determined patients' treatment options without oversight from insurers or imposition of quality assurance mechanisms or utilization review. Physicians

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[9] Because insured patients had complete free choice of providers and insurance companies were not allowed to discriminate among providers, insurers had no bargaining power over them. All insurers could do was tinker with coverage ("plan design") and pay the bills.

[10] The Blues used the publicly palatable argument of enrollee "freedom of choice" of providers to justify their insistence on no selective provider insurance.

predominantly operated solo practices and relied on referrals and personal relationships for new business. Further, they vehemently resisted efforts to compare quality among physicians or to publish complaint or malpractice information for consumer comparison.

Despite the fact that the Blues had tremendous power in determining the costs and type of health care delivered during this time period, a few alternative organizational models had begun to provide cost-effective health care by the early 1970's. These organizations, known as prepaid group practices ("PGPs") sought to band physicians together to provide coordinated care at a discounted, prepaid amount for individuals or employer groups who were willing to contract exclusively with them. Kaiser Permanente had its origins in the 1930's in medical care programs designed to care for workers in Henry J. Kaiser's industrial enterprises. Kaiser and the Group Health Cooperative of Puget Sound, another early PGP plan, combined multi-specialty group practice, per-capita prepayment, voluntary enrollment and physician responsibility for the management of care. The PGP concept became more popular as health care inflation continued to rise. Independent practice associations (IPAs) such as the Health Plan of the Redwoods emerged in the late 1960's to compete against PGPs, which were beginning to capture significant business in select markets because of their cost-effectiveness and comprehensive coverage. (The characteristics of Group, IPA and other health maintenance organization plans are discussed in greater detail below.)

D. The Rise of Managed Care

By 1970 expanding health care costs had become a national concern for employers, the government, and health care economists. Experts worried that if trends continued unabated, the national economy would suffer. In 1970, Dr. Paul Ellwood coined the term health maintenance organization, or "HMO" as part of his vision of a national strategy to solve America's problems of uncontrolled health care expenditure growth, fragmentation and lack of accountability. The cornerstone of the strategy was the creation and fostering of competition among a group of HMOs, which he conceived of as non-governmental, comprehensive care organizations.

In 1973, as a reflection of growing interests and trends in HMOs, Congress passed the HMO Act which: (1) defined HMOs as being either the group practice or the individual practice variety; (2) provided grants and loans to help start non-profit HMOs; (3) required that all employers with 25 or more employees that offered traditional insurance to offer employees the choice of one group practice and one individual practice HMO as alternatives to traditional health insurance if such HMOs served the areas where their employees lived and requested inclusion; and (4) over-ruled state laws that inhibited HMO growth Despite the powerful interests of such opposing provider organizations as the Blues and the American Medical Association, the establishment of this legal toehold helped open up the market to competition.

Although HMOs grew in number and power after 1973, traditional FFS still dominated the landscape and health care costs continued to dramatically outpace inflation. Seeking to bring soaring health care costs under control, some employers proposed to continue to offer employees the traditional FFS coverage but to do so with selective provider contracting. Under this modified FFS scheme, employees would be encouraged to accept the narrower physician panel through financial incentives. Employers would be able to create economies by negotiating prices and utilization controls (discussed more below) with providers. But until 1982, compliance with the

principles of "guild free choice" advocated by the Blues and medical associations precluded development of this kind of insurance in most states. In 1982, in a major legislative battle in California, employers, insurers and labor unions teamed up to defeat the California Medical Association and secure the enactment of new legislation (AB799 and AB3480) permitting Medi-Cal and private insurers to contract selectively and pass the savings on to the purchasers. Most other states followed. This legislation authorized Preferred Provider Insurance (PPI), the other main form of managed care. While both of these laws were critical to the rise of managed care, economic and competitive developments have been the primary driver of growth in the managed care industry.

It was not until the late 1980's that the cost pressures on employers and government really forced a proliferation of managed care across the nation.

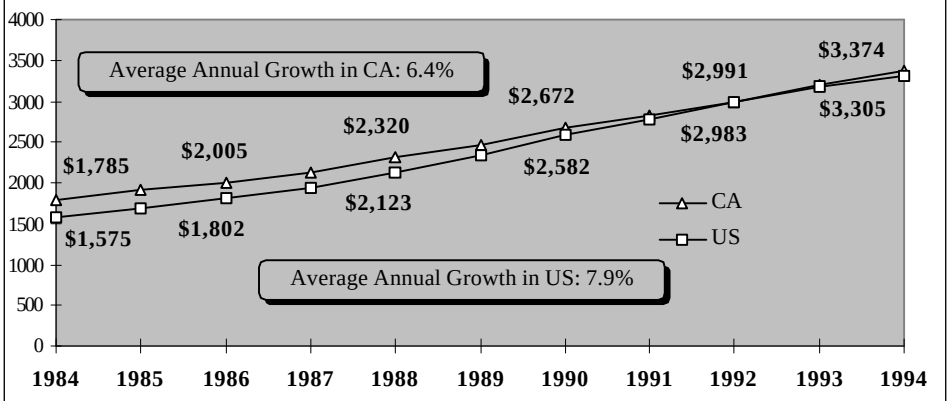
Figure 1 identifies the steady increase in the percentage of domestic product spent on health care and illustrates why health care has become such a crucial area for reform and Figure 2 compares per capita health spending for California and US from 1984 to 1994. California fell below the national average in per capita spending on health in 1993 due to a lower rate of cost increase, which was at least partially attributable to higher managed care penetration level.

Figure 1: National Health Expenditures as a Percent of the Gross Domestic Product

	1960	1970	1980	1990	1991	1992	1993	1994
NHE as %GDP	5.1%	7.1%	8.9%	12.1%	12.9%	13.4%	13.6%	13.5%
Avg Ann %Chg NHE	–	10.5%	12.9%	10.9%	9.1%	9.5%	7.0%	6.4%
GDP ($ Billion)	$527	$1,036	$2,784	$5,744	$5,917	$6,244	$6,550	$6,931
Avg Ann %Chg GDP	–	7.0%	10.4%	7.5%	3.0%	5.5%	4.9%	5.8%

Source: HCFA Office of the Actuary: Data from Office of National Health Statstics

Figure 2: Per Capita Health Spending in California and US: 1984 - 1994



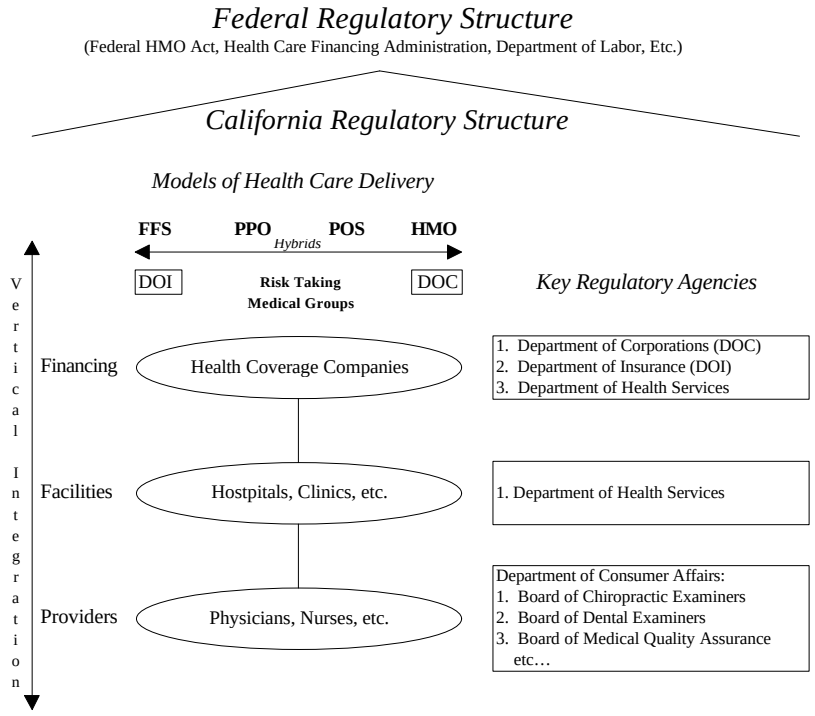
Source: A Report on the State of Health Care in California, The Lewin Group, August 1995.

III. REGULATORY OVERVIEW OF HEALTH CARE

This brief review of the evolution of managed care illustrates that while legislation created opportunities for a broadening of the health care market, health care cost inflation and economic and competitive conditions have prompted the subsequent increase in managed care penetration. As managed care has expanded and become a fact of life for a large percentage of the population, regulatory interest and activity has intensified.

Following is a schematic overview of health care's regulatory environment, which illustrates the regulatory complexity of the industry. Much of the regulation of health care reflects either the uncoordinated nature of legislation from different eras or the uncoordinated manner in which recent laws have been passed. A more in-depth analysis can be found in the Task Force's "Regulatory Environment" report.

FIGURE 3: SCHEMATIC OVERVIEW OF CALIFORNIA'S HEALTH CARE REGULATORY STRUCTURE



Source: Task Force Staff

Several specific elements of this regulatory picture should be highlighted to elaborate on the general industry profile. First, different state bodies regulate different types of health plans: the Department of Insurance monitors all traditional indemnity health insurance plans and insured PPOs, other than employer self-funded plans, under the 1982 state law described above; the Department of Corporations regulates all HMOs under California's Knox-Keene Act of 1975 (which in generalized terms may be viewed as a state counterpart to the federal HMO Act of 1973); and the Department of Health Services oversees MediCal (state version of Medicaid) plans.[11] Under the federal Employment Retirement Income Security Act of 1974 ("ERISA"), self-insured employer-sponsored plans are preempted from state regulation, including costly benefit

[11] Under the 1965 law, Medicaid is a joint federal/state welfare program in which federal law defines benefit minimums and pays a portion of the costs (federal participation ranges from approximately 50-75% depending on the nature of the cost and the relative wealth of the state); states have the option to provide a range of additional benefits for which federal "matching funds" are available. Medicare is a national entitlement plan and an amendment to the original Social Security Act of 1935; it is regulated and funded at the federal level, but state provision alterations can be requested through various codes.

mandates and state premium taxes. These plans are subject to federal regulation under the Department of Labor only.

One of the most important things to recognize about this regulatory framework is that employers, under ERISA, are always free to cover their employees through unregulated self-insured arrangements, likely based on preferred provider insurance arrangements. Thus they can escape the cost burdens of benefit mandates or of HMO regulations under Knox-Keene if they find these burdens too onerous. In this sense, state regulation of employee health insurance is very limited.

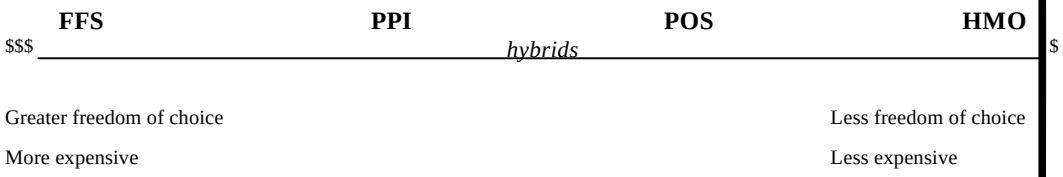
Medical groups and IPAs that contract with health plans to provide care (discussed more below) are currently not regulated closely or directly by any of the above state departments. Regulation in this area has been indirect, through regulation of medical group contracts with health plans.

IV. MANAGED CARE: VARIETY, TECHNIQUES, PLAYERS & CHALLENGES

The market, economic and regulatory factors shaping the growth of managed care have been extremely complex and have not encouraged rapid movement toward the goal of creating a quality, cost-effective and accessible integrated health care delivery system. Nearly two decades of discussion and experimentation in the arena of managed care, however, have resulted in a broader public awareness of the wide spectrum of health plans and their attributes and the main techniques that managed care organizations employ.

A. The Health Care Delivery System Continuum

From the point of view of patient freedom of choice of provider at the point of service, the health care financing and delivery system covers a broad spectrum of health benefits and financial intermediaries, ranging from the essentially unorganized traditional FFS approach to the closely managed HMO.



- *FFS (Fee-for-Service).* This traditional health insurance coverage is named for its method of charging whereby a physician, hospital or other provider bills for each encounter or service rendered. Under FFS payments, expenditures increase if the fees themselves increase, if more units of service are charged, or if more expensive services are substituted for less expensive ones.

- *PPI (Preferred Provider Insurance).* Also known as "preferred provider organizations," PPOs contract with a selected panel of providers, who agree to accept discounted fees as payment in full and to comply with reporting and utilization management. In this model, consumers have a choice of using participating (i.e. contracting) or non-participating providers; however, financial incentives are built into benefit structures to encourage customer utilization of participating providers. This control of patient populations gives the insurer

negotiating power with providers while allowing consumers to make more cost-conscious decisions.

- *POS (Point of Service).* Under the newest major type of health insurance, subscribers effectively enroll in an HMO, but preserve the option to seek care outside the network with a higher level of cost sharing. Typically, the costs of going "out of network" are fairly substantial - deductibles of several hundred dolars and cost-sharing of 20-30%. Experience to date has been that members of POS plans continue to receive the vast majority of their care from the HMO panel[12].

- *HMO (Health Maintenance Organization).* An organized system that provides health care through participating providers in a geographic area and accepts the responsibility for providing or otherwise assuring the delivery of an agreed-upon set of basic and supplemental health maintenance and treatment services to a voluntarily enrolled group of persons. Providers or provider groups are reimbursed for services through capitation, a predetermined, fixed, periodic payment made by, or on behalf of, each person or family enrolled or through some variation on the FFS arrangement. The payment is fixed without regard to the actual amounts of services provided to an individual enrollee. HMOs require copayments, a minimal payment made at the time of each visit, to help control utilization.

- *Hybrids.* Any mix of physician practices, hospitals and/or health plans that competes for enrollees and uses some managed care techniques. New federal legislation is encouraging the formation of new models, and to date California's regulatory structure has not been updated to keep up with the innovative market responses that do not fit neatly into the Department of Insurance or Department of Corporations.

B. Essential Managed Care Techniques

Regardless of where they fall on the health care financing and delivery continuum, all managed care organizations employ techniques to control costs and quality, including but not limited to the following:

Utilization management/review, which includes practice guidelines, gatekeepers and/or pre-authorization procedures, attempts to introduce rationalization into health care delivery and remove unnecessary and ineffective resource consumption. It seeks to identify and minimize practice variations through the description, communication and promulgation of best practices.

- *Selective provider contracting* by plans allows introduction of competition among providers and the ability to remove cost- or quality-ineffective providers (i.e. physicians, hospitals, laboratories). This contracting is permitted in California under the federal HMO Act of 1973, the state Knox-Keene Act of 1975, and state AB3480 of 1982 (which authorized PPI).

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[12] A 1994 study estimated that approximately 16% of enrollees in POS plans used the out-of-network option (Meyer and others, 1994, quoted in Zelman, The Changing Healthcare Marketplace, San Francisco: Jossey-Bass, 1996). Recent estimates of POS subscribers going out of network have been as low as 10%.

- *Negotiated fees* contain costs through capitation payments, discounts (generally ranging from 20-40%), salaries or fee-for-service with "withholds" or bonuses (described in greater detail below). Currently, the federal government has legislated certain discounts for Medicare and Medicaid HMOs. Government attempts at "capping" payments in the 1970's through price controls resulted in a higher service volume, which was then responded to with the development of the RBRVS.

- *Quality management* refers to the use of process reviews, input selection, outcomes measures and patient satisfaction evaluations to rationalize expenditures and create competitive advantages. It is a dynamic improvement process and is commonly known in health care and other industries as continuous quality improvement (CQI).

- *Enrollee incentives* can be negative or positive and range from not permitting any reimbursement for use of providers not on selected panels (as in HMOs) to encouraging preventive care. In the 1990's, many purchasers have reinforced payer plan incentives by shifting a portion of the premium costs (e.g. defined contributions) to the employee, thus making the "end" health care consumer somewhat more price sensitive in his/her choice of plan. The efficiency of the market could be significantly improved by arming consumers with relevant information coupled with increased incentives to drive high quality, cost-sensitive choices.

USE OF MAIN MANAGED CARE TECHNIQUES BY DELIVERY SYSTEM TYPE

	Delivery System Type			
Managed Care Technique	**FFS**	**PPI**	**POS**	**HMO**
Selective Provider Contracting		✓	✓	✓
Utilization Management/Review				
Practice guidelines		✓	✓	✓
Gatekeeper			✓	✓
Pre-authorization procedures	✓	✓	✓	✓
Negotiated Fees[13]				
Salary				✓
Capitation			✓	✓
Discounts		✓	✓	✓
Fee-for-service with withhold	✓		✓	✓
Quality Management				
Measure outcomes and/or processes			✓	✓
Patient satisfaction evaluation (often)	✓	✓	✓	✓
Enrollee Incentives/Disincentives				
Out of network care permitted		✓	✓	
Preventive care encouraged			✓	✓

As evidenced above, managed care spans a broad range of coverage types and employs varied techniques to encourage cost-effectiveness. The variety of structure in delivery systems is explored

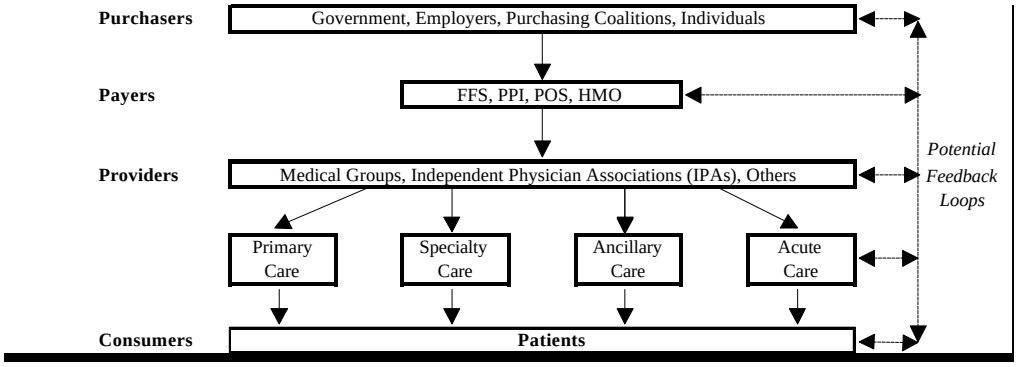
[13] Although this table only lists use of principal managed care techniques, it should be noted that all health care financing and delivery systems use the traditional FFS payment approach at times.

more explicitly below and continues to evolve rapidly as economic, regulatory and market factors prompt differentiation and evolution.

C. The Players: A Four-Tiered Structure for Analyzing Health Care Delivery

The four-tiered structure below characterizes the general financial, service and information flow through the health care delivery system. The "purchasers" control the market share of the various delivery systems and contract coverage for their enrollees, or "consumers"/patients, who ultimately receive care. The "payer" type determines how restrictive use of "providers" will be: FFS has virtually no restrictions; PPI uses very limited constraints; POS encourages strong cost-consciousness and loyalty to an HMO panel of providers while providing free choice; HMOs restrict consumers' covered care to the specified and previously contracted providers and tend to be the most economical of all options.

FIGURE 4: FOUR TIERS OF MODERN HEALTH CARE[14]



Purchasers

Traditionally, there have been three main purchasers of health care: the government, employers and individuals. Purchasing coalitions have recently become a significant force in this area. Recent purchasing trends reveal that government has taken over a larger portion of responsibility for purchasing health insurance. Coverage by private employers has declined, as they have either stopped offering any health care benefits, stopped offering benefits to employees' dependents, or discovered other ways to minimize their portion of the health care burden (e.g. part-time workers, out-sourcing). An increasing portion of the population is thus left potentially reliant on public funds – either through government sponsored coverage or uncompensated care -- for health care. A study has shown that had managed care and its downward pressure on health costs not existed,

[14] This structure is adapted from a flow chart in J.M. Rosenbluth, "Integrated Delivery Systems," *Volpe, Welty & Company Equity Research* (an industry report), March 3, 1995, p. 27. Changes made to it were independent of *VW&Co.*

the uninsured problem could be even worse[15]. Nonetheless, uninsured levels have steadily increased to over 15% nationally and nearly 20% in California[16] despite cost containment and increasing government participation in health insurance through broader benefit range definitions for Medicaid.

The Task Force recognizes the serious problem of lack of any or sufficient health care insurance for many Californians. While it is deeply concerned about this issue, the Task Force acknowledges that the issue of health insurance coverage falls outside the scope of the mandate for the Managed Health Care Improvement Task Force.

Public Purchasers

Public sector expenditures include benefits for public employees and retirees (Federal Employees Health Benefits Program, FEHBP, and California Public Employee Retirement System, CalPERS), low-income Medicaid recipients (or MediCal as it is termed in California), the Medicare population, the safety net (government reimbursement for care to uninsured, poor people), and other special populations such as veterans and native Americans. As mentioned above, the medical inflation rate for public sector care has outpaced that of private care in recent years.

Figure 5: Public Expenditures, United States and California, 1990 and 1994, $Billions

	US, 1990	US, 1994	CA, 1990	CA, 1994
Medicaid	41.1	87.2	11.8	16.5
Medicare	109.6	168.1	10.6	10.7

Sources: CA: A Report on the State of Health Care in CA, The Lewin Group, 1995. US: Health Care Financing Review, Statistical Supplement, 1996

As public expenditures have increased in California and across the nation, public purchasers have increasingly turned to managed care. California has encouraged government employees to use managed care through CalPERS which offers state employees a variety of HMO and PPO options. While California is one of the national leaders in private managed care and Medicare penetration,

[15] J.F. Sheils, R.A. Haught (of The Lewin Group, Inc.), "Managed Care Savings for Employers and Households: Impact on the Uninsured", follow-up report prepared for The American Association of Health Plans, Jun 18, 1997.

[16] A Report on th State of Health Care in California, The Lewin Group, August, 1995..

the state's public sector (MediCal and Medicare) managed care coverage levels fall below those of several other states. (Figure 6).

Figure 6: Managed Care Penetration in Public Health Care Markets: 1992-1995

	1992	1993	1994	1995
US				
Medicare	6.0%	7.0%	8.0%	10.0%
Medicaid	12.0%	14.0%	23.0%	32.0%
CA				
Medicare	-(a)	-(a)	30.0%	-(a)
Medicaid	11.6%	16.0%	17.2%	23.4%

(a): data not available

Source: US figures: HCFA, Office of Managed Care (Dial, et al., 1996), HCFA, Statistical Supplement 1995

CA figures: CA DHS, Managed Care Division

Employer Purchasers in the Private Sector

Although the majority of health insurance coverage in the United States has historically been linked to employment, increases in health care costs have helped prompt both a change in the type of employer coverage and a decrease in the overall percent of citizens receiving coverage through private sector work. The percent of the national employment pool being offered health care coverage dropped from 81% in 1995 to 78% in 1996[17]. The lowest coverage percentage occured in the Western region, where only 76% of workers were offered health insurance coverage in 1996.

Private employers provide health coverage under three primary arrangements:

1. *Through a third party payer,* such as an insurance company or HMO. With traditional insurance, firms pay health plans (usually one or two per firm) a monthly or annual "premium" on behalf of each employee to insure and provide necessary care. After the premium has been paid to the plan, the employer's risk is capped.

2. *Through "self-funding" coupled with the services of third party administrator (TPA)*[18]. Under the self-funding scenario, firms pay for routine coverage for their employees, use TPAs to administer the plan and gain access to a provider panel, and cover costly events such as an

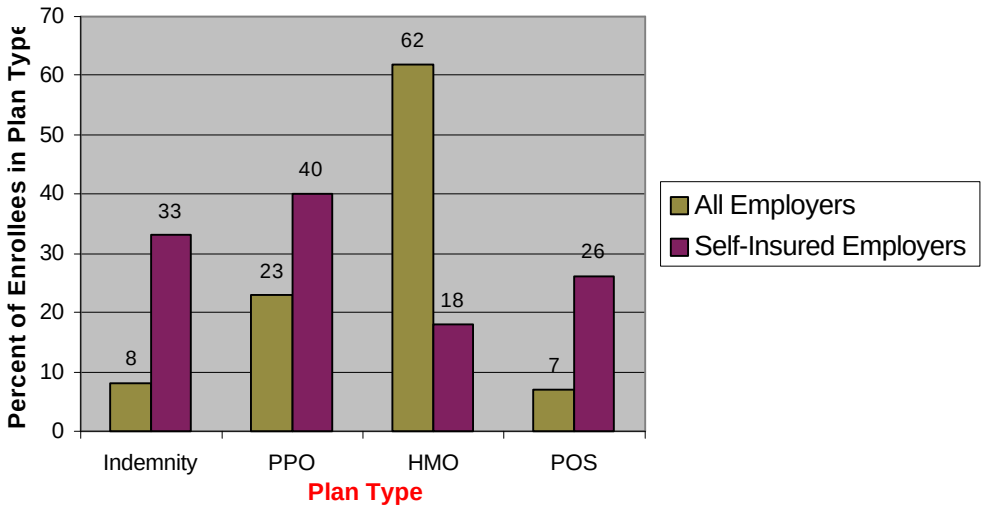
[17] KPMG Survey of Employer Sponsored Health Benefits, 1993-1996.

[18] Third party administrators (TPAs) are also known as Administrative Service Organizations (ASOs).

extremely premature infant through the purchase of reinsurance and "stop loss" coverage. A major employer survey indicated that 46% of employees were enrolled in self-insured health plans in 1995.[19] The move to self-insurance is particularly prevalent outside of HMOs, accounting for 63% of all FFS enrollees, 60% of all PPO enrollees, 53% of all POS enrollees, and 11% of HMO enrollees. The rapid shift from FFS to managed care over the past several years has resulted in a large percent of the population being covered by self-insured plans; 61% of all employees whose employers self-insure were in managed care plans in 1995, in contrast to 33% in 1993[20].

Figure 7 compares the enrollment, by plan type, of CA employees whose employers self-fund with all employees in 1996:

Figure 7: Health Plan Enrollment by Insurance Status of Employer: CA, 1996



Source: Tom Rice, UCLA, based upon data collected by KPMG for CA Wellness Study.

[19] KPMG/Peat Marwick/Wayne State University survey, 1996.

[20] See C. Sullivan et al., "Employer-Sponsored Health Insurance in 1991," Health Affairs (Winter 1992): 172-185.

3. *Through pooling their buying power with that of other firms by joining a purchasing coalition.* California leads the country in this third, and new, type of coverage. With purchasing coalitions, groups of employers pool their employee bases to exert buying power, provide wider choice, and/or pool risk, all of which leads to more affordable health coverage. Pacific Business Group on Health (PBGH) of San Francisco, a private coalition open to all California employers with over 2,000 employees, was the first coalition in the state. CalPERS also uses this approach for the state's public employees. Coalitions designed for small to medium sized employers have also been developed, most notably the state-organized Health Insurance Plan of California (HIPC), open to all employers with 50 or fewer employees. Some private coalitions, such as Benefits Alliance and California Choice are also addressing the health care purchasing needs of small or mid-size firms in the private sector.

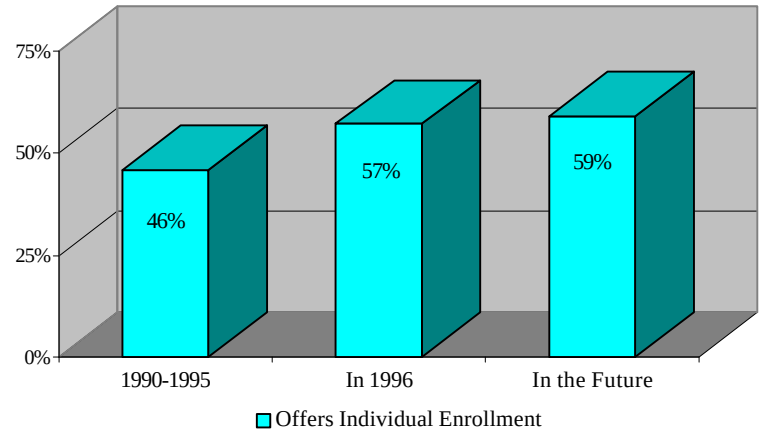
The rate of health care coverage through employment is correlated with the size of a company and the industry. As Figure 8 illustrates, smaller firms are less likely to offer insurance to their employees. These factors bear out in California, where the HIPC, was created in 1993 to help ameliorate the market gap in coverage for employers with fewer than 50 employees.

Individual Purchasers

The smallest group of purchasers are individuals who purchase insurance from a health plan because either they do not qualify for or do not use public or employment coverage. The number of individual purchasers is relatively small because the people who are not offered coverage through work and who do not qualify for public programs tend to be poor and cannot afford to purchase individual insurance.[21] Although more health plans are now offering coverage to individuals, enrollment has not increased dramatically. (Figures 8, 9).

[21] An exception to this is seen in the Medicare program, where some wealthier retired individuals buy supplemental insurance.

Figure 8: Percent of California HMOs Offering Individual Coverage



source: Deloitte & Touche, California Association of HMOs, 1997 Profile.

Φιγυρε 9: Χομπαρισον οφ Περχενταγε οφ Χαλιφορνιανσ ωιτη Πριϖατε Ινσυρανχε ωιτη Υνινσυρεδ ανδ Οτηερ Ινσυρανχε Τψπεσ, 1994

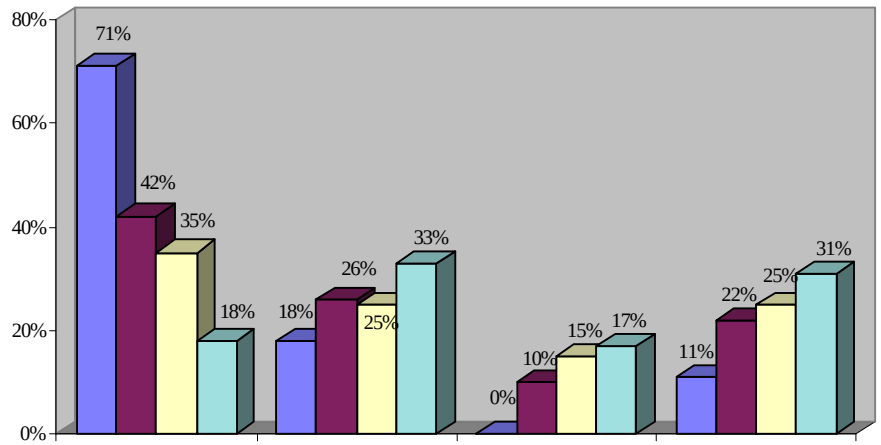
	XA	ΥΣ
Πριϖατελψ Ινσυρεδ	4%	5%
Υνινσυρεδ	23%	17%
ϑοβ–βασεδ	57%	66%
Μεδι–Χαλ (Μεδιχαιδ)	14%	10%
Οτηερ Πυβλιχ	2%	2%

Payers and Providers

Payers and providers represent what most people currently consider the "heart" of the health care system. Payers are the traditional indemnity insurers and newer managed care plans. Providers include physicians, hospitals, acute care centers and ancillary service suppliers.

Figure 10 chronicles the popularity of various plan types over the past decade. As is evident, enrollment in pure indemnity/FFS insurance has decreased dramatically as managed care enrollment has made significant gains. The newest form of managed care, POS, is gaining in consumer popularity as it combines the cost-effective elements of HMOs with the flexibility and easier access to providers of PPI. Government-funded Medicare and Medicaid have been slower to shift from traditional FFS-based plans to managed care.

Figure 10: Enrollment by Plan Type, U.S.: 1988-1997



Source: KPMG Surveys of Employer Sponsored Health Benefits, 1997; 1996; 1994; 1991; HIAA Survey, 1988.

Reimbursement mechanisms between payer and provider represent one of the key distinguishing features both among the health plans in the continuum described above and among the different sub-categories of HMOs described here. Reimbursement can be tied to either volume or quality measures or both. Reimbursement also occurs on two levels: from the payer to the provider group and from the provider group to the individual provider level.

HMO Plan Models

There are five main HMO sub-categories: the fully integrated payer/provider "group" model, the "staff", "independent physician association," "network" and "mixed" models. The HMO varieties can be categorized into two broad groups: integrated delivery system HMOs and carrier HMOs. Integrated delivery system HMOs feature a vertically integrated payer and provider organization with mutually exclusive contracting. Kaiser Permanente is the most prominent example of this plan type. In contrast, the more common "carrier" HMOs, with origins in the early IPA plans like Health Plan of the Redwoods, feature selective provider contracting but not on an exclusive basis.

Integrated Delivery System HMOs:

- *Group.* An HMO that contracts with one independent medical group practice to provide health services under a mutually exclusive contract. The plan (payer) level compensates the medical group (provider) with prepaid "capitation" payment. In the Kaiser Permanente example, the provider level Permanente Medical Groups typically reimburse individual physicians with salaries and modest bonuses based on hospital cost experience. Under this model type, the sole contracted medical group determines the formulary and utilization procedures for its physician members. As such, procedures are clear, HMO bureaucracy is

minimized, and physicians typically feel more ownership than in other "carrier HMOs" which operate without exclusivity and its associated influence.

- *Staff.* A staff model HMO delivers health services through physicians who are exclusively employed by the HMO. Typically, the physicians are paid straight salaries. Currently, there are only two pure staff model HMOs in California, both small public or not-for-profit entities: Contra Costa Health Plan and Valley Health Plan. Their popularity is on the wane in California and elsewhere. For example, Harvard Community Health Plan, a pioneer staff model nonprofit in the1970's, recently converted all its staff model clinics to groups in order to get the physicians more involved in cost management and patient satisfaction.

Carrier HMOs:

- *Independent Physician Associations (IPAs).*The term IPA has two connotations: (1) an HMO that relies primarily on physicians in independent or individual practices; and (2) an administrative organization that negotiates contracts with health plans and obligates its associated physicians (in independent or group practices) to provide all necessary professional services to members of an HMO that contracts with them. IPAs do not engage in exclusive contracting.

  Independent physicians or medical groups usually contract with multiple IPAs, and might see patients covered by several health plans with which these IPAs have contracts. The IPA organizations and the medical groups typically pay doctors based on negotiated FFS with withholds or salaries with bonuses based on quality and utilization measures. A feature of this model is that the participating physician generally has most of his or her practice outside a single IPA.

  Like providers in other carrier HMO organizations, IPA physicians face significant coordination issues as a result of the fact that they often contract with multiple plans whose medical directors or oversight committees determine the utilization controls and formularies. Providers often feel their opinions are not reflected in the distantly set formulary, and as IPA medical groups contract with many HMOs, keeping formularies and utilization procedures straight is often complex and frustrating. Although HMO plans are regulated by Knox-Keene at the state level, minimal regulation exists at the medical group or IPA delivery level, and a medical group's reimbursement practices and service quality are not generally publicly known.[22]

- *Network.* A pure network model HMO contracts with two or more independent group practices, possibly including a staff group, to provide health services. While a network may contain a few solo practices, it is predominantly organized around groups. Like the IPA model, this format does not have exclusive contracts.

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[22] This stated, some purchasing coalitions and industry groups (e.g. California Cooperative HEDIS Reporting Initiative—CCHRI) are beginning to use their market or social power to "reach through" the HMO and report medical group level information for quality. At this point no one is conducting a similar large-scale investigation of medical group financial arrangements.

The main difference between the network and IPA models is that in the network model the independent medical groups (or more rarely physicians in solo practice) do not have a regionally organized "IPA" intermediary as an administrative body to negotiate contracts with HMOs. The various medical groups in a network contract with the various payer plans independently. The Network model HMO faces the same complex coordination issues associated with the IPA model.

- *Mixed.* An HMO that uses any combination of the above models. For example, in recent years as a result of acquisitions, mergers and innovative adaptation to market conditions, HMO plans have simultaneously contracted with multi-specialty medical groups and IPAs. The term "mixed" can be somewhat ambiguous as an HMO carrier that contracts with medical groups and IPAs might be referred to as "mixed" or "network". Mixed models are often HMOs with IPAs and a newly acquired staff form that are converting to a network form.

FIGURE 11: HMO MODELS - KEY CHARACTERISTICS SUMMARY

HMO Model	HMO Class	Reimbursement Payer/Provider*	Ease of Coordination	Perceived MD Freedom
Group	Integrated	Capitation	Very High	Average
Staff	Integrated	Salary	High	Average
IPA	Carrier	Discounted FFS; FFS w/ withhold or bonus	Average	High
Network	Carrier	Capitation, discounted FFS, FFS with withhold or bonus	Average	High
Mixed	Carrier	———	*Varies*	———

* Most common reimbursement form(s).

Consumers

Historically, consumers have had very limited direct influence on health plan or provider service structure. Enrollees generally trusted their physicians to assert their perceived interests in the FFS structure, and uninsured people relied on charities or the government to represent their perceived interests. With the introduction of broader plan choices as well as service and cost containment, consumers are being prompted to be more assertive. Consumer feedback mechanisms are in their formative stages; their strength varies and is often limited. (Refer to the Task Force report on Consumer Involvement, Communication and Information.)

In addition to requiring and having access to more information about the health care system in the era of managed care, consumers are being made more aware of the cost implications of various plan types. At the time of enrollment, consumers in a workplace often face different contribution levels that correspond to the costs of the plans. A consumer enrolled in a PPI or POS plan also faces different costs based upon the type of provider he/she chooses to use. Employers and plans

are using financial incentives directed at consumers to help reinforce other cost-controlling efforts of managed care.

D. Challenges Health Care Must Address to Create Cost-Effective Delivery

The primary challenges and objectives facing health care financing and delivery systems are those of integrating a broad range of previously independent entities. Although FFS plans are integrating various components of health care financing and delivery, the HMO end of the delivery continuum is addressing the various forms of integration more systematically. To create both cost-effective and high quality health care, the health industry is addressing seven main types of integration.[23]

1. *Integration between financial responsibility and care delivery* In this stage of integration, provider incentives are aligned with patients' interests in receiving high quality, efficient care. Managed care has addresses this with varying forms of per capita prepayment that have providers sharing in the risk and seeking cost-effective health care delivery.

2. *Integration between providers and enrolled populations*. This integration facilitates and encourages population-based medicine that broadens encounter-based medicine by incorporating an epidemiological perspective. Elements include a greater emphasis on preventive medicine, health and safety education and advocacy, and a matching of appropriate numbers and types of providers to the needs of an enrolled population.

3. *Integration of the full spectrum of health care services*. By either duplicating or creating the effects of an integrated delivery system HMO through contracts and structures that align incentives, this integration seeks a holistic approach to health care that would optimize the use of preventive services, education, doctors' office, inpatient and outpatient services, home nursing, pharmaceuticals, and other resources. For example, doctors collaborate with pharmacists to choose therapies that produce the best outcomes and minimize total costs of care, rather than simply choosing drugs based on cost or supplier relationships in isolation. Care is delivered in the least costly appropriate setting.

4. *Integration among doctors and between doctors and other health professionals*. This level of integration assumes that an optimal team of doctors and allied health professionals will be brought together to provide appropriate and cost-effective care. It depends upon plans' contracting with the right numbers and types of professionals and establishing the right specialty mix to assure patients good access to primary care and to ensure that proficient and qualified specialists are available when necessary. For example, many organizations now use nurse practitioners to provide a great deal of primary care, including annual ob/gyn exams.

5. *Integration between doctors and hospitals*. This integration ensures that doctors have an interest in efficient utilization of hospital resources, an area in which there were no incentives under the traditional FFS system. In a well integrated system, doctors develop practice

[23] Integration need not mean common ownership. In fact, the trend is toward integration by contractual relationships.

patterns that facilitate efficient hospital operations; they work with hospitals to reduce unnecessary record keeping and support "value for money" investment decisions.

6. *Horizontal integration among hospitals.* With this type of integration, hospitals in a region combine to share administrative support functions and to consolidate volume-sensitive clinical services such as open-heart surgery and neonatology. Prominent examples of horizontally integrated hospital systems in California include Mercy, Sharp and Kaiser Foundation. Horizontal integration also increasingly represents mergers of groups of hospitals across regions to gain buying power from national suppliers and/or to gain easier access to private capital markets.

7. *Integration of patient information.* Managed care has encouraged the integration of patient information collected at all points at which a member has contact with the health care delivery system. Ideally, each provider who has patient contact can have a complete picture of the patient's medical history, which helps him/her to coordinate care with other providers and avoid duplicate tests and unfavorable drug interactions. This information, used anonymously, can also serve as a basis for research on the relationship among diagnoses, treatments and outcomes. It can also be used to provide feedback to providers for quality improvement purposes.

V. CALIFORNIA'S HEALTH CARE DELIVERY SYSTEM

As many in the health care industry attempt to develop the integrations described above, the composition and demographics of health care delivery has begun to shift. Managed care organizations' efforts to drive excess cost out of health care have affected, among many other things, the utilization of hospital beds and the overall volume and composition of the physician supply. An overview of the key macro changes in California's health care delivery systems accompanying the proliferation of managed care follows.

A. Physician and Hospital Bed Supply

Changes in hospital bed capacity and utilization rates and the composition and supply of the physician work force are relevant and easily measurable indications of the impact of managed care on health care delivery. In the cost-unconscious FFS era, hospitals competed for physician loyalty and became sources of civic pride by having a large bed capacity and by acquiring state-of-the-art medical technologies. Because excess capacity uses resources inefficiently, because federal Medicare inpatient hospital compensation is now on a per case basis rather than cost reimbursement, and because managed care will not pay hospital overhead charges, hospitals in the managed care era are reducing bed capacity.

Figure 12 shows how the reduction of hospital bed capacity in California has mirrored the national trend but well surpassed the national average. Although capacity has decreased, utilization figures show that the system is still facing an excess capacity (Figure 13)[24]

Φιγυρε 12: Ηοσπιταλ Βεδσ/1000, ΧΑ ανδ ΥΣ, 1990–1996

	1991	1993	1995
ΧΑ	2.65	2.51	2.39
ΥΣ	3.69	3.57	3.34

Figure 13: Hospital Bed Utilization Rates, CA and US, 1990-1996 (days/1000)

	1990	1993	1995
CA	610.08	561.24	523
US	889.56	838.91	765

Source: American Hospital Association, 1991, 1994 and 1996 Hospital Statistics

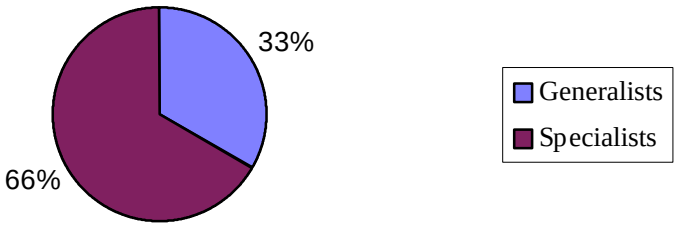
Note: Bed day figures include acute hospital days only.

In addition to prompting rationalization of hospital beds and impacting hospital utilization, managed care will likely bring about a measurable effect on the composition and overall size of the physician work force. As managed care organizations have emphasized prevention and health promotion and have sought to match contracted physician supply to the needs of their enrolled populations, the HMO industry demand for primary care physicians (PCPs) has increased, and specialists have faced a tighter market. The Council on Graduate Medical Education (COGME) recommends that the U.S. physician workforce be composed of 50% specialists and 50% generalists (family practitioners, general internists, general pediatrics and general practice)[25].

[24] A hospital bed at 80% occupancy produces 292 days per year. 2.39 beds/1000 population produces 698 days/1000 per year. California is using 523 days/1000 per year and could use fewer if it were at an efficient level. At current occupancy levels California needs only 75%of its hospital bed supply.

[25] Source: "California Needs Better Medicine: Physician Supply and Medical Education in California, California Primary Care Consortium and the Center for Health Professions," University of California San Francisco, May, 1997.

Figure 14:
Distribution of Physicians in CA, 1994



As figure 14 indicates, CA was well off this mark in 1994, with only 33% of active non-federal physicians practicing as generalists. These percentages did not materially change from 1990 to 1994. From 1995 to 1996, changes in the market began to become apparent as trends in enrollment in residency programs showed a shift toward generalist fields. (See Task Force Report on Academic Medical Centers for a further discussion of trends in medical school and residency enrollment).

The state of California currently displays substantial regional variation in the supply of patient care physicians. Though statewide the specialist per 100,000 population ratio was 126, or 20-48% above COGME recommendations, three regions had ratios that fell below the recommended level. The supply of generalists in most California regions is inadequate to barely adequate when measured against COGME standards, and is particularly low in inner cities and rural areas.[26]

As managed care has grown, imbalances in physician supply have become more apparent. Federal and state legislation facilitating selective provider contracting enabled managed care organizations to create competition among physicians and reduce costs. The physician supply increased steadily through the 80's to the mid 90's (Figure 15).[27]

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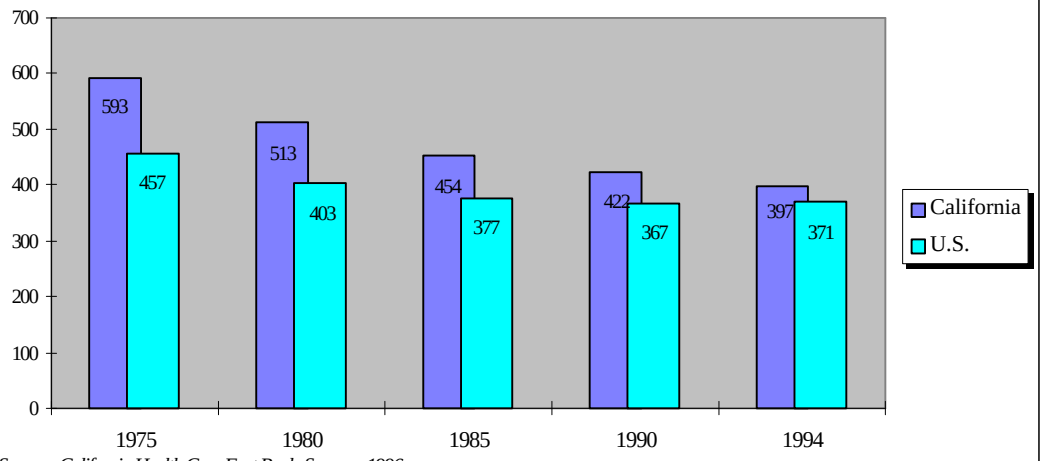
[26] Ibid.

[27] Medical school enrollment and residency figures show the potential for a decrease in these figures early in the next century. See Task Force Report on Academic Medical Centers.

Figure 15: Persons per Physician, CA, 1975-1994



Source: California Health Care Fact Book, Summer 1996.
Note: The decline in the ratio of medical students to population was more pronounced in CA than in the US because population growth was more rapid in CA (34% versus 14%).

B. Composition of Health Care Personnel

Reductions in physician and hospital bed supplies represent just the surface of the health care transformation. Although it is difficult to determine to what degree these changes are attributable to managed care, demographic changes or regulatory developments, it is clear that evolving economic incentives have altered the composition of health care delivery. With managed care's emphasis on prevention, an aging population, and financial incentives to move patients out of hospitals at the earliest appropriate time, expenses have been reallocated from specialists and acute hospital settings to PCPs, pharmaceuticals, out-patient care, and long-term care areas.

The composition of non-physician health care personnel has also changed to reflect managed care's effort to match skill and cost with patients' medical needs. Training programs and demand for certain groups of health care providers, including advanced practice nurses and physician assistants have been increasing.[28] Health care employers in California have indicated that they will significantly increase the number of Advanced Practice Nurses they employ over the next several years.[29] (Figure 16)

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[28] UCSF Center for the Health Professions.

[29] California Strategic Planning Committee for Nursing, *Planning for California's Nursing Workforce*, 1996.

Figure 16: Anticipated Growth in Annual Enrollment in Advanced Practice Nursing Programs

CA, 1994-1997

	1994	1997 (est.)	Overall Growth	Anticipated Annual Growth
Generalist NP	542	658	21.4%	6.7%
Specialist NP	128	152	18.8%	5.9%
Nurse Midwife	88	102	15.9%	5.0%
Nurse Anesthesist	41.0	58	41.5%	12.3%
Clinical Nurse Specialist	377	396	5.0%	1.6%

Source: UCSF Center for the Health Professions, California Needs Better Medicine, May 1997.

C. Covered Services

Coverage of mental health and substance abuse services has been increasing as advocacy and research have proven the extent to which they are causal or compounding factors in poor health status. Many managed care organizations treat these services as "carve outs" and subcontract with specialty organizations to develop networks and administer benefits.

Behavioral health and health promotion activities have become "mainstream" managed care features, but are only slowly being incorporated into standard medical training and practice. The clinical practice of these disciplines relies on multi-disciplinary teams, requiring physicians to work collaboratively with allied health professionals.

V. MATURATION AND CONSOLIDATION OF THE INDUSTRY

A. Industry Maturation

Economic, regulatory, cultural and other effects all shape a state's industry profile. California is advanced in its managed care penetration, but it is not necessarily viewed as a "representative" state. For example, medical groups and IPAs are very prevalent and powerful in California, while in most other states physicians are employees of hospitals or still contract individually with HMOs. This fact, and others, shape the industry maturation and consolidation process. Kaiser and Ross-Loos were the initial managed care players in CA. As they met with success in various regions, new competitors, in the form of IPAs, began to enter to complement the initial firms'

ability to address a growing market need—cost-effective health care delivery.[30] The early development of managed care followed the typical industry pattern: as entrepreneurs see the success of a new form in one market, they introduce it to new markets and eventually competitors appear or spread there also.

B. Mergers and Consolidation in the Health Care Industry

In the managed care industry, expansion dominated until the late 1980's and early 1990's when widespread merger activity and industry consolidation began among the larger players. While the payer/HMO and hospital consolidations have been attracting the most attention, mergers are occurring in all tiers of the health care industry.

HMO Consolidation

In the late 1980's, managed care coverage was fairly extensive, and HMOs began to be concerned that growing competition would erode their profit margins. Large, publicly traded HMOs sought to assure earnings growth by cutting costs and entering less developed markets. As a result, HMOs have predominantly undertaken horizontal or market extending mergers.

With horizontal mergers, firms reduce the costs of duplicate operations and/or increase their market power vis-á-vis suppliers and consumers; mergers may also be be used to absorb a rival. In market extending mergers, firms gain needed earnings for financial stability and broader geographic coverage for large purchasers. HMOs are using mergers to improve competitiveness, reduce operating costs, increase revenues to satisfy Wall Street, become more attractive to larger purchaser, or reduce competition. Some HMOs have also merged as a defensive measure, fearing that they might miss a time-limited opportunity to establish new market presence.

Figure 17 illustrates HMO mergers by tracing the composition of the five largest HMOs in California in 1996[31]. Government and private-sector analysts have conducted a great deal of research to determine potential effects of this consolidation on health care delivery. No proposed major California merger has been denied yet because of anti-trust concerns, but as managed care penetration and consolidation increase, this concern becomes more of an issue. Some argue that the economy of scale argument for merging becomes less valid above a relatively small total HMO enrollment of 115,000.[32] Others argue that consolidation may be acceptable if no firm or firms have the ability to dominate completely and cite that some of the largest firms are addressing consumers needs most creatively and efficiently (e.g. introduction of the POS plan). Most industry

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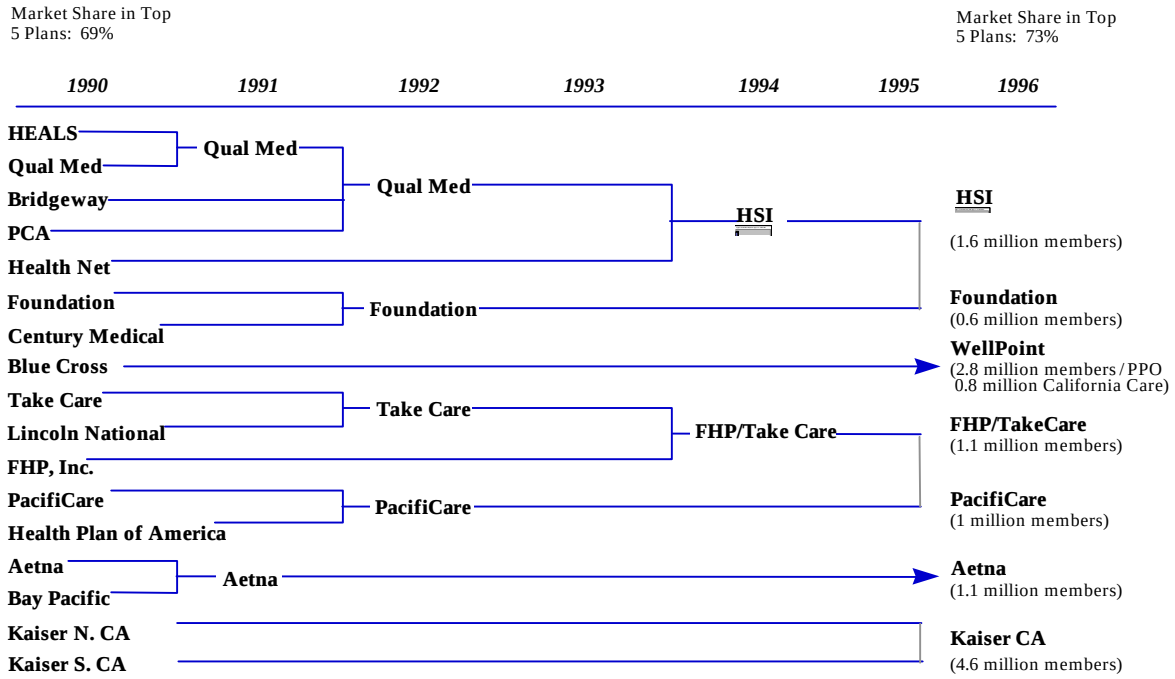
[30] The first IPAs in CA were developed in the 1960's.

[31] Data presented is from July 1996. Some recent developments are not noted on this chart. Foundation and HIS merged to form FHS. Pacificare and FHP completed a merger, and Blue Shield acquired two HMOs in Southern California, making them the fourth largest HMO in California in 1997.

[32] R. Given, "Economies of scale and scope as an explanation of merger and output diversification activities in the HMO industry,"*Journal of Health Economics* (Winter, 1996), pp. 685-713.

observers agree that there is still a great deal of competition at the HMO level in all but a few rural areas where competition has always been a problem.

Figure 17: CA HMO Consolidation – 1990-1996



Source: Interstudy Competitive Edge Survey, 2.2 and 7.1. Membership figures are for all products, statewide. Note: Data from July 1996; changes since then not reflected: Foundation and HHH have merged to become FHS; Pacificare and FHP have merged; and Blue Cross acquired two plans in Southern California to become the state's fourth largest plan.

Other Industry Tiers

Although some horizontal and market extending merger activity among other industry player levels may have occurred for efficiency reasons, HMO plan consolidation likely prompted a quicker and more extensive trend. As HMOs increased their buyer and seller power, hospitals, medical groups, IPAs and purchasers had to consolidate as a defensive measure so that their margins would not be decimated.

Provider consolidations have become more prevalent at both the hospital and medical group level. These horizontal mergers have drawn a great deal of attention and have become a cause for antitrust concern in some locations.

Vertical mergers combining hospital and medical groups have also become more commomplace. These organizations are attempting to coordinate a range of services such that they could go directly to the purchaser and capture the profits currently being collected by HMOs.

C. For-Profit vs. Not-for-Profit Corporate Status

Historically, insurance plans (e.g. Blue Shield/Blue Cross), and delivery system HMOs (e.g. Kaiser Permanente) were non-profit for several reasons: physician employees or contractors received all compensation through salary or FFS reimbursement; the tax-free status left more money for physicians; and the physician-driven organizations did not need access to private capital markets and preferred not to be financially accountable to Wall Street. US Hospitals have historically been not for profit as well, a fact which has been seen as appropriate to their charitable purpose. The majority have been government-owned or owned and operated by religious organizations, and the remaining private hospitals were largely built with government funds through the Hill-Burton program. The government continues to subsidize hospital construction through tax-exempt bond financing.

As health care delivery has shifted from FFS to managed care and competition among all players has proliferated, access to private funds has become more important.[33] Not-for-profit status has become increasingly difficult to maintain because it often precludes access to the capital critical for growth and investment. Additionally, one traditional source of non-profit capital, subsidized government loans, has virtually dried up as health care expenditures have sky-rocketed and deficits have become more onerous.

Although a few large non-profits such as Kaiser Permanente and Catholic Healthcare West (a large, integrated delivery system based in San Francisco) may have enough internally generated revenues or market clout to survive while staying non-profit, most competitors do not. For-profit status is becoming increasingly more common in CA and across the nation. Figure 18 shows how the profit status of HMOs shifted in California from 1985-1995.

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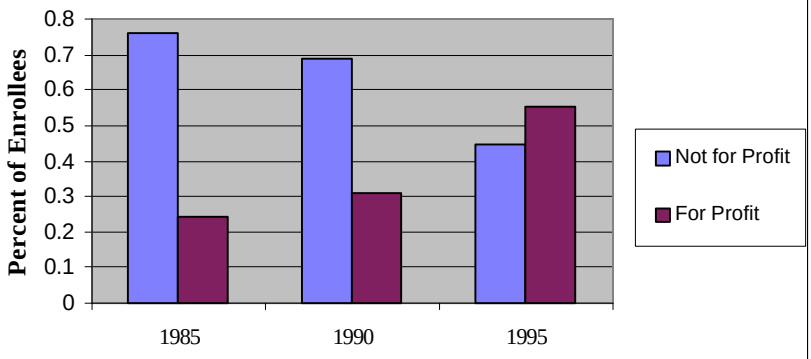
[33] HMOs need capital to finance their past and future growth and assure that they are able to maintain broad, attractive networks; hospitals increasingly need access to private funds to remain competitive and develop infrastructures comparable to those of their for-profit competitors; medical groups and IPAs need capital to build information systems infrastructures and expand through acquisition.

Figure 18: Tax Status of California HMOs, 1985-1995



Source: Interstudy Competitive Edge

One facet of the increasing media backlash against managed care in recent years has been the perceived negative effects of consolidation, especially as for-profit HMOs merge with non-profit ones. Critics are concerned that for-profit health care organizations will not care for vulnerable populations or the poor or uninsured as well as non-profits. Studies comparing care and adjusting for risk of the populations have shown for-profit hospitals to provide as good, if not better, care than non-profits. However, as cost/price competition increases, it becomes increasingly difficult for providers to cross-subsidize care for vulnerable populations through an increase in fees charged to private and government payers or purchasers.